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February 5, 1992

TO: Minerals File

FROM: D. Wayne Hedberg, Permit Supervisor *DWH*

RE: Site Inspection, 5M - Incorporated, Leeds Silver Reef Mine,
M/053/002, Washington County, Utah

Date of Inspection: February 4, 1992

Time of Inspection: 1:30 - 4:00 PM

Conditions: Sunny, clear and cool

Participants: Jason Knowlton - UDERR; Pete Stevenson & Bill Smith - EPA;
Wayne Hedberg - DOGM

The purpose of this inspection was to assist representatives from the Denver Office of the EPA (Emergency Response Branch) in conducting their preliminary site assessment/evaluation of the Leeds Silver Reef site. The EPA wanted to personally evaluate the potential public health and safety hazards associated with this suspended/abandoned mine site. The Utah Division of Environmental Response and Remediation (UDERR), had prepared and submitted a detailed Analytical Results Report on this site to the EPA in November 1991. The report was prepared based upon UDERR's 1990 sampling activities, undertaken as part of a Screening Site Investigation under authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The site inspection began from the northern end of the property and progressed to the southern end. The maintenance building area was the first location evaluated. Gamma radiation and volatile organic measurements were taken in and around the maintenance/workshop/office area. The three transformers found within the building and the transformer on the pole outside were not opened or sampled for PCB's. Serial numbers and manufacturer's names were recorded from the transformers by the EPA representatives.

The second stop evaluated was the upper end of the agglomeration and ore crushing area. There are 3 large transformers located here and a smaller

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fourth transformer was found on the ground with its top pried open. One large transformer and the smaller transformer were measured for volatile organic vapors. Elevated levels were noted by the monitoring instrumentation. Gamma radiation measurements were made of the surrounding ore and tailings stockpiles.

The third location evaluated was the central/primary processing facilities area. Test strips were used to measure the pH of the process solution ponds and the electrowinning vats. The upper primary pregnant solution pond indicated a pH of @2-3. The pH in the series of the electrowinning/processing vats varied a bit more, but appeared to range somewhere between 3.5 - 4.5. Slightly elevated gamma radiation measurements were noted around some of the processing waste piles located on the ground adjacent to these vats. The processing tanks were evaluated for liquid and solids content. Most remained open and were empty.

The overflow/runoff collection ponds located immediately south of the processing facilities area were inspected next. Water was noted in the lower end of two of the ponds as well as the smaller upper runoff impoundment, located immediately adjacent to the scrap iron shredding area. It was unclear if the water in this pond originates from a permanent seep or if it is just snow melt runoff from the disturbed area. Well established riparian vegetation in this pond would indicate a more permanent source of water (i.e., a seep). This upper earthen impoundment could be a potential source of the water observed in the lower earthen runoff collection ponds. There is a remote possibility that the upper "lined" solution ponds could be the source of the water in the lower, downgradient runoff collection ponds. If this assumption is correct, it could mean that the integrity of the pond liners has been jeopardized.

The last two areas inspected were the main (most southern) electrical substation and the two monitoring well locations. This concluded our inspection of the site. Before departing, I asked the EPA representatives, "where do we go from here?" I expressed DOGM's concern with commencing reclamation of the site as soon as possible. I was informed that the EPA would re-evaluate the analytical results from UDERR's report, compare it with their onsite assessment and make a decision within the month. We will be notified accordingly.

jb

cc: Pete Stevenson, EPA
Jason Knowlton, UDERR
Lowell Braxton, DOGM
Minerals staff (route)

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